



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE
AND TECHNOLOGY
SCHOOL OF HEALTH SCIENCES**

**UNIVERSITY EXAMINATION FOR BACHELOR IN COMMUNITY HEALTH AND
DEVELOPMENT**

3rd YEAR 1st SEMESTER 2013/2014 ACADEMIC YEAR

CENTER: BUSIA

COURSE CODE: HCD 3216

COURSE TITLE: INTRODUCTION TO MEDICAL AND VETERINARY PARASITOLOGY

EXAM VENUE: STREAM:

DATE: EXAM SESSION:

Instructions:

- 1. Answer ALL questions in Section A and ANY other 2 questions in Section B.**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

Section A: Answer ALL questions (30 marks)

1. With specific examples: Define the following terms: **Antipathetic symbiosis**, **Necrotrophic**, parasitism and, **Biotrophic** parasitism (3 Marks).
2. Infection with malaria parasites specifically *P.falciparum* can lead to cerebral malaria whose symptoms can include abnormal posturing and **conjugate gaze palsy** among others. Other complications of malaria infection are **black water**, renal failure etc. what are the meaning of **conjugate gaze palsy** and **black-water**. What is the name given to the liver stages of the malaria parasites (3 marks)?
3. Some pathogenic protozoa form cysts under certain environmental condition while others persist in trophozoite form. Name two pathogenic protozoa in the phylum Archezoa, one of which forms cysts and the other that does not form cysts (3 marks).
4. Name the **definitive** and **intermediate** host of *Echinococcus granulosus*. Name the disease that this parasites causes in humans (3 marks).
5. Creeping eruption is a condition caused by Cutaneous larval migrans in domestic pets. What is the causal agent of this condition? State the mode of transmission and treatment of Cutaneous larval migrans. (3 Marks).
6. Describe the causal agent of coccidiosis in poultry. What is the mode of transmission and treatment of coccidiosis (3 Marks)?
7. The protozoan *Entamoeba histolytica* predominantly infects humans and other primates. Infection with these parasites can be **asymptomatic** or can lead to **amoebic dysentery** (bloody diarrhea) or amoebic **liver abscess**. Name the drugs of choice for treatment of each condition i.e. treatment for asymptomatic cases, amoebic dysentery and liver abscesses (3 marks).
8. Name the first **intermediate** host of the causative agent of diphyllbothriasis. What is the **mode** of transmission and **treatment** for diphyllbothriasis in humans (3marks).
9. Name the two **classes** of medically and veterinary important parasitic worms that are found in the Phylum Platyhelminthes. What are the definitive host *Echinococcus multilocularis* (3 Marks)
10. Name the definitive and intermediate hosts of the following parasitic worms: *Schistosoma haematobium*, and *Schistosoma mansoni*. State the diagnostic features that are used to distinguish between the above two Schistosomes (3 Marks).

SECTION B: ANSWER ANY TWO QUESTIONS (40 MARKS).

1. Ticks are obligatory ectoparasites of vertebrates. Ticks are very important to livestock farmers because apart from transmitting pathogens, they directly cause poor health and loss of production in many ways. Describe
 - A. The type of harm ticks cause to livestock by directly feeding on the animals (5 Marks)
 - B. Physical injury/damage (5 Marks)
 - C. Poisoning. (5 Marks)
 - D. With examples describe the type of pathogens ticks transmit to livestock (5 Marks)

2. Filariasis is a human disease caused by several species of round worms. Describe the causal **agent** of lymphatic filariasis in humans. Describe the mode of **transmission, symptoms, diagnosis** and **treatment** of lymphatic filariasis in humans (20 marks).

3. Describe the three forms of Trypanosomiasis that are transmitted to both humans and animals. Describe their ecological ranges, mode of **transmission, diagnosis, symptoms treatment** and **control** (20 marks).

4. Leishmaniasis is a vector-borne protozoan disease that is commonly transmitted to humans. Describe the two main forms of Leishmaniasis that occur in humans. Name the parasites that are involved and their mode of transmission, treatment and control (20 marks)?